



Promotion of appropriate technologies in water and sanitation using the Village Model Concept: The Case of Kikandwa village, Mukono district

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Introduction

- Improvements in appropriate technologies and management approaches Vs Research
- Model village approach
 - Observation of use of real prototypes installed in a community setting.
- Appropriate Technology Centre mandate





Description of the Case Study

- The model village project;
 - Definition/description
 - Ongoing intervention in which technologies and management approaches for water and sanitation are studied for the purpose of improvement and adoption elsewhere
 - Establishment of benchmarks and baseline data for measuring change.



- Project area

- Kasawo sub-county

- 123 functional water sources for domestic use

- 3 functional valley dams provide water for livestock.

- Kikandwa village is predominantly rural

- Project phase;

- Meeting with district Stakeholders

- Meeting with Community/Local leaders



Community leaders meeting held at Kasawo sub-county



- **Baseline survey**

- The household listing and sample selection

- Data collection methods

- Interviews

- Questionnaires

- GPS

- Data analysis

RWU



Survey Results

- Only 42% access safe water within the standard 0.5 km walking distance
- Technology mix for water supply for domestic use



– Boreholes

- Three; St. Mark, Muwanga & Kikandwa
- Sourcing water from neighbourhood (kigayaza)
- O & M of these boreholes
 - WSC
 - Monthly subscription (300- 1000/-)
 - Vandalism



Fetching water at Muwanga Borehole

–Rain water harvesting

- Small scale
- 27% harvest rain water
- Containers used; jerry cans, pots, saucepans and small drums.
- 2 households have improved rain water harvesting tanks
- Challenges;
 - No gutters
 - Water safety
 - Containers



–Unprotected wells

- Seven; wantindo, Miiro, Wangato, Kasule, Bukaide, Stephan and 1 unidentified
- 10% use these wells
- O & M of these sources

–Water for production

- Rain-fed agriculture
- Practicing crop farming (seasonal)
- No irrigation (knowledge Vs practice)



Water source for an infant school in Kikindwa



- Lessons Learnt

- Rainwater harvesting is a known concept but not practiced (why?)

- Although most of the water sources are operational, their state is appalling (why?)

- Strength of triangulation; interviews , questionnaires and GPS

Conclusion

- Interesting insights
 - Kikandwa village shows a typical rural village situation in Uganda
 - Poverty, poor access to social services and lack of access to appropriate technologies
 - Only 3 safe water sources for 231 households and several unprotected sources (implication!)
 - Intervention areas will be identified Together with the communities
 - ATC set to spearhead the promotion of appropriate technologies and approaches that suit the needs of the communities.



Recommendations

- Appropriate technologies and management approaches that can make water sources safe and sustainable would be one of the ways to curtail the health risk
- Introduce relatively low cost technology e.g. self supply and water purification
- Reduce over reliance on rain fed agriculture; irrigation
- Install demos in agreement with the community
 - Need to devise means of creating a sense of ownership of water sources (how?)
 - Monitoring



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